



**Jefferson County**  
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Hillsboro, MO 63050  
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E-MAIL [jefferson@missouri.edu](mailto:jefferson@missouri.edu)  
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October 31, 2006

Tom Griffith  
Doe Run Co.  
881 Main Street  
Herculaneum, MO 63048

Tom:

Enclosed please find the soil test for the front and back yards for Charles Gill, at 812 Brown Street. The samples show adequate soil nutrients and the soil pH is sufficient. However, the samples are higher in clay than some of the soils that have been used for remediation in the last couple of years. My best guess is that these soils were put in place before we started testing soils.

These soils can produce an attractive lawn, but will require a little extra effort. As we discussed on site, aeration is the key to making clay soils productive. I assume that you have already aerated and seeding this lawn this fall. I would suggest that the lawn be aerated again next fall and seeded if necessary. As organic matter is incorporated into the clay soil during aeration, the soil will hold water better, drain easier in wet weather, and become more open for root growth. It just takes a little time. In fact, clay soils can be some of our more productive soils.

Fall fertilization is essential to establishing roots in clays soils. From the soil test, consider applying something like 8 lbs of 12-12-12 per 1000 sq feet in September and again in early November. Avoid spring applications of fertilizer as it will result in excessive top growth at the expense of root growth.

A bill for the tests is enclosed. Please call if you have questions.

Sincerely,

  
Dean Wilson  
Agriculture Specialist

Cc: Charles Gill

40338920



Superfund

# University Extension

University of Missouri  
Columbia

## Soil Test Report

MU Laboratories

23 Muttford Hall  
Columbia, MO 65211  
(573) 882-0623

or

P.O. Box 160  
Portageville, MO 63873  
(573) 379-5431

Serial No. H54643H-2	County Jefferson	Region
Submitted 10/2/2006	Processed 10/6/2006	

<http://www.soiltest.psu.missouri.edu/>

Sample ID: GILL-BACK

This report is for:

Lab No: D0611179

DOE RUN CO. %  
881 MAIN STREET  
HERCULANEUM MO 63048

Last Limed: unknown

Submitted by:  
Firm No. Outlet:

SOIL TEST RESULTS			RATING					
			Very low	Low	Medium	High	Very high	Excess
pHs	6.1		*****					
Phosphorus (P)	21	lbs/a	*****					
Potassium (K)	272	lbs/a	*****					
Calcium (Ca)	2650	lbs/a	*****					
Magnesium (Mg)	726	lbs/a	*****					
Organic Matter:	2.0 %		Neutr. Acidity: 1.5 meq			CEC: 11.5 meq		

### Fertilizer & Limestone Recommendations (lbs/1000 sq ft)

Crop	Nitrogen (N)	Phosphorus(P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Zinc(Zn)	Sulfur(S)	LIME
3 fescue,blue,ryegrass(estab)	0.5	2.0	0.0			0
4 fescue,blue,ryegrass(avg)	2.0	1.0	0.0			0

Comments: ---Some herbicide labels list restrictions based on soil pH in water. Use the estimated pH in water of 6.6 as a guide to the label. If you wish to have soil pH in water analyzed, contact your dealer or local Extension specialist listed below.

---The soil should be tested every 2 to 3 years to determine the effects of your fertilization practices and to develop a new set of fertilizer and limestone guidelines.

\*\*\*Your soil test indicates a need for calcium. Apply 60 pounds of gypsum per 1000 square feet to increase your calcium.

\*\*\*The pHs is adequate for your lawn. Application of lime is not recommended.

\*\*\*The soil needs additional organic matter for establishing lawns. See MU Publication G6955, "Improving Lawn and Landscape Soils".

\*\*\*When establishing a fescue, bluegrass or ryegrass lawn, apply one pound of nitrogen per 1000 sq. ft. in early September and again in early November in addition to any phosphate and potash recommended above.

\*\*\*Do not apply sulfur to established lawns as sufficient amounts cannot be applied to lower pH without the possibility of leaf burn.

\*\*\*For average maintenance of fescue, blue, ryegrass apply one pound of nitrogen per 1000 square feet in early September and again in early November or April-May. If available use a fertilizer containing about 1/2 of the nitrogen in slow release form. See MU Publication G6705, "Cool-Season Grasses, Lawn Maintenance Calendar".

---Particle Size Analysis results are: clay loam ; % sand: 27 silt: 36 %clay: 37.

### Additional Test Results

Soil Texture: clay loam Sand: 27 Silt: 36 Clay: 37

Regional Specialist Dean Wilson

Phone 636-797-5391

MP 552 7/98

  
Signature

**University  
Extension**University of Missouri  
Columbia**Soil Test Report**

MU Laboratories

29 Mumford Hall  
Columbia, MO 65211  
(573) 882-0623

or

P.O. Box 160  
Portageville, MO 63873  
(573) 379-3431

Serial No. H54643H-1	County Jefferson	Region
Submitted 10/2/2006		Processed 10/6/2006

<http://www.soiltest.psu.missouri.edu/>

Sample ID: GILL-FRONT

This report is for:

Lab No: D0611178

DOE RUN CO. %  
881 MAIN STREET  
HERCULANEUM MO 63048

Last Limed: unknown

Submitted by:  
Firm No. Outlet:

SOIL TEST RESULTS			RATING					
			Very low	Low	Medium	High	Very high	Excess
pHs	6.0		*****					
Phosphorus (P)	40	lbs/a	*****					
Potassium (K)	278	lbs/a	*****					
Calcium (Ca)	3182	lbs/a	*****					
Magnesium (Mg)	832	lbs/a	*****					
Organic Matter:	1.8 %		Neutr. Acidity:		1.5 meq	CEC:		13.3 meq

**Fertilizer & Limestone Recommendations (lbs/1000 sq ft)**

Crop	Nitrogen (N)	Phosphorus (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Zinc (Zn)	Sulfur (S)	LIME
3 fescue, blue, ryegrass (estab)	1.0	1.0	0.0			0
4 fescue, blue, ryegrass (avg)	2.0	0.5	0.0			0

Comments: —Some herbicide labels list restrictions based on soil pH in water. Use the estimated pH in water of 6.5 as a guide to the label. If you wish to have soil pH in water analyzed, contact your dealer or local Extension specialist listed below.

—The soil should be tested every 2 to 3 years to determine the effects of your fertilization practices and to develop a new set of fertilizer and limestone guidelines.

\*\*\*Your soil test indicates a need for calcium. Apply 60 pounds of gypsum per 1000 square feet to increase your calcium.

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**Additional Test Results**

Soil Texture: clay loam Sand: 24 Silt: 37 Clay: 39

Regional Specialist: Dean Wilson

Phone 636-797-5391

MP 552 7/06

Signature